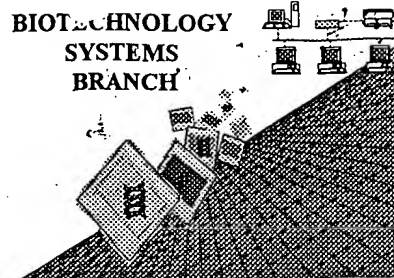


RAW SEQUENCE LISTING **ERROR REPORT**



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/887,272
Source: OPE
Date Processed by STIC: 7/30/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

BEST AVAILABLE COPY

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/887,272

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 ☒ Skipped Sequences
 (NEW RULES) Sequence(s) 69 and many more missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/887,272

DATE: 07/30/2001

TIME: 11:31:15

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Output Set: N:\CRF3\07302001\I887272.raw

Does Not Comply
Corrected Diskette Needed*error*
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4 <110> APPLICANT: Hou, Yu-Ming
 5 Quan, Sheng
 6 Chang, Hur-Song
 7 Zhu, Tong
 8 Whitham, Steve
 9 Goff, Steve
 10 Glazebrook, Jane
 11 Chen, Wenquiong
 12 Katagiri, Fumiaki
 13 Xie, Zhiyi
 14 Tao, Yi
 15 Zou, Guangzhou
 16 Cooper, Bret
 18 <120> TITLE OF INVENTION: PLANT GENES INVOLVED IN DEFENSE AGAINST PATHOGENS
 21 <130> FILE REFERENCE: 1360.003US2
 23 <140> CURRENT APPLICATION NUMBER: US/09/887,272
 23 <141> CURRENT FILING DATE: 2001-06-22
 23 <150> PRIOR APPLICATION NUMBER: 60/213,634
 24 <151> PRIOR FILING DATE: 2000-06-23
 26 <150> PRIOR APPLICATION NUMBER: 60/214,926
 27 <151> PRIOR FILING DATE: 2000-06-23
 29 <150> PRIOR APPLICATION NUMBER: 60/261,320
 30 <151> PRIOR FILING DATE: 2001-01-12
 32 <150> PRIOR APPLICATION NUMBER: 60/264,353
 33 <151> PRIOR FILING DATE: 2001-01-26
 35 <150> PRIOR APPLICATION NUMBER: 60/273,879
 36 <151> PRIOR FILING DATE: 2001-03-07
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 40 <170> SOFTWARE: FastSEQ for Windows Version 4.0

ERRORED SEQUENCES

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 74 <212> TYPE: DNA
 75 <213> ORGANISM: Arabidopsis thaliana
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RAW SEQUENCE LISTING

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DATE: 07/30/2001

TIME: 11:31:15

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RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/887,272

TIME: 11:31:15

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Output Set: N:\CRF3\07302001\I887272.raw

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/887,272

DATE: 07/30/2001

TIME: 11:31:15

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Output Set: N:\CRF3\07302001\I887272.raw

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/887,272,

DATE: 07/30/2001

TIME: 11:31:15

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1247 cttgcaaaaca aagagacatt aatcgaggtt ggtcctttcg tgcttcgct tgccaacaaa 660
1249 cataatgtaa agattcttcc ggcagattca gaacattctg ccatatttca gtgtattcaa 720
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1265 aaaccagaca atgtgaaata cccatccatg gatcttgctt atgctgctgg acgagctgga 1200
1267 ggcacaatga ctggagttct cagcgccgcc aatgagaaag ctgttgaaat gttcattgat 1260
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1699 <210> SEQ ID NO: 39

1700 <211> LENGTH: 2631

1701 <212> TYPE: DNA

1702 <213> ORGANISM: Arabidopsis thaliana

1704 <400> SEQUENCE: 39

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1709 tctagctaca acgatgagac tacaggtata aagtatgttt cggattcggc gtttgttgat 180
1711 tcaggaacaa caagagaat tgcagctcag tttcaatcaa gtggttttga tagacacttg 240
1713 ttgaacgtga gaagtttccc tcaaagcaag agaagctgtt acgatgttcc gacgccgaga 300
1715 ggcaaagggt ttaagtatct aatcagaact cgtttcatgt acggaacta tgatgatctt 360
1717 ggaagagtac ccgagttcga tctctatcta ggagtaaact tttgggactc tgttaaactc 420
1719 gacgatgcaa caactatact caacaaagag ataatcacca ttccactttt agacaatggt 480
1721 caagtgtgtg ttgttgataa gaacgcagga actccatttt tgtctgtctt ggagatacgg 540
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1725 gattacagca aaacgggaaa acttccatcg aggtacaaag atgacatata tgaccgtata 660
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1729 caattttctta acaatggcta ccaaccggtc tctactgtca tgagcactgc agaaacagcg 780
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1733 tatgtatata tgcactttgc tgaaattgaa gtactgaaa gcaaccagac gagagaattc 900
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RAW SEQUENCE LISTING

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DATE: 07/30/2001

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Output Set: N:\CRF3\07302001\I887272.raw

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1741 gagttccttc agatcccaac tcatccacag gatgttgatg ccatgaggaa gattaaagcc 1140
1743 acgtatagag tgaagaagaa ctggcaagga gatccttggtg ttcccgtaga ttattcttgg 1200
1745 gaaggtattg actgtatcca aagtgataac actactaatc ctagagtcgt ttcactaaat 1260
1747 atatctttta gtgaattaag aggccagata gatccagcct tctccaacct tacatctata 1320
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1753 agattgcatg aaagatcaaa gaatggatct ctttccttaa gatttggtag aaatccggac 1500
1755 ctttgctctc ctgattcctg ttcaaacaca aagaagaaga acaagaatgg atacatcatt 1560
1757 ccattagtag tcgtaggaat catcgctggt cttttgacgg ctttagcttt gttccggcgt 1620
1759 ttcaagaaaa aacaacaaag aggtacactt ggtgagagga atgggccgtt gaaaactgca 1680
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2068 <213> ORGANISM: Arabidopsis thaliana
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2081 tgctactttg ccttaaaagc gtggcacgcg cagcaagcag gcgcggctgc agttcttgtg 360
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2085 gatggtttca tagagaagct aacaatccca tcggtgttaa tcgataaatc atttgagat 480
2087 gacttaagac aagggtttca gaaagggaaa aacatagtta taaaactaga ttggagagag 540
2089 tctgtgcctc atcctgataa gagagttaga tatgagctgt ggactaatag caatgatgag 600
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2093 atactcgaaa aaggcggtta taccgcgttt acgcgcatt atattacttg gttttgccct 720
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2099 aatctgagac agctttgtgt gcatagagtt gcgaatgaga gtagcaggcc ttgggttttg 900
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RAW SEQUENCE LISTING

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2107 attggccgag gaaaccgggg agatgttacg atattgccaa cattagtcac caataacgct 1140
2109 caatatacgag ggagattgga gagaaccgag gttttaaagg cgatatgcgc tggttttaat 1200
2111 gaaacatcgg agcctgccat ttgcttaaac acaggtctag agacaaatga gtgccttgaa 1260
2113 aacaatggtg gttgctggca ggatacaaaa gcaaaccatca ctgcttgta agacacattc 1320
2115 agaggaagac tctgcgagtg tccggttgta aaaggtgttc aatataaagg agacgggtac 1380
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2119 gacacaagga acggttaaac tttctctgct tgctcagact ctgtatctac tggctgcaaa 1500
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2123 gacgcttcgg tatgtcaatg tagcggttgc agatgcaaga actcatgggg tggatacaaa 1620
2125 tgcagctggt ctggtgaccg gctttacata aacgatcaag atacttgat agagagatat 1680
2127 ggatccaaaa cggcatggtg gctcacattc ttgatactgg ctatcgttgc agtagccggt 1740
2129 ttatgctggt atatatctca caaataccgg ttcaggtctt acatggactc agagattatg 1800
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2397 ggtgtgttat attttctcgg tcttgccatc tgctttattg gttgtcagc catcactgca 180
2399 cggttcttca agtctatgga gaatgtcgtg aaacattccc gtaaagtggg tacaattgat 240
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2403 atcagtttgt tggcggttg aactagcttc cctcagattt ctttggctac catcgatgca 360
2405 atacggaata tgggggagcg gtatgctgga ggtcttggtc ctggaacact tgttggctca 420
2407 gctgcatttg atcttttccc catccacgct gtttgtgctg ttgtgcaaaa agctggagaa 480
2409 ctgaaaaaga tatccgactt aggtgtttgg ctagttagc tcgtatggtc ttttgggct 540
2411 tacatctggc tatacataat cctcgaggtg tggtcaccaa acgtaattac acttgtggag 600
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2423 gcgactaaga agggtaaggc gaagaattct actgtttttg acatttggaa acatcaattc 960
2425 gtggatgcaa taacggtaaa aatcttcaac ttaccaatgg atagcattta tcttcgaatc 1020
2427 gcgaaatctt tctggcattt actcctcgcc ccttggaac tgctttttgc atttgtgccc 1080
2429 ccctgcaaca ttgctcacgg ttggatcgct ttcactgct ctctcctct catcagtggg 1140
2431 gtagcctttg ttgtcacaag atttactgac cttataagct gtgtcactgg aataaaccca 1200
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2553 <213> ORGANISM: Arabidopsis thaliana

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2560 gagtcaaagt caaccatcgg tgtcgagttc gccacaagaa gtgttcattg cgacgaaaaa      180
2562 atcatcaaag ctcagctttg ggacaccgct ggtcaagaaa gatacagagc aatcacgagt      240
2564 gcatactaca gaggagcagt gggggcactt ctagtatacg acataactcg acacataacg      300
2566 ttcgaaaacg ttgaaagatg gctcaaggag ctctcgtgacc ataccgatgc caacgttgta      360
2568 atcatgcttg ttggaacaa agccgatctt cgtcaccttc gtgcagttcc cacagaagaa      420
2570 gctagatcat tctctgaaag agaaaacatg tttttcatgg agacttctgc tttggatgct      480
2572 acaaatgtcg aacaagcttt cactcatgtc ttgactcaaa tctatcgtgt aatgagccgt      540
2574 aaagctcttg atggtactgg agatccgatg tctttaccta aaggacaaac cattgatata      600
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2654 <210> SEQ ID NO: 54

2655 <211> LENGTH: 2061 2060

2656 <212> TYPE: DNA

2657 <213> ORGANISM: Arabidopsis thaliana

2659 <400> SEQUENCE: 54

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2660 atggaacctc agagaaaaca ctgcacagcc ctccacacgt gtcacccctg ccggcgaacc      60
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2664 catgtacact caattgtcaa cgcaaacaac actctaataa catgtcttct tctcctctcc      180
2666 gatattgttc tcgccttcat gtgggcaacc acaacttccc tccggttaaa cccgattcat      240
2668 cggaccgagt accctgaaaa atatgctgct aaaccggagg actttccaaa gctggacggt      300
2670 tttatatgca cggctgatcc gtacaaggag cctccgatga tgggtggttaa caccgcttta      360
2672 tcggtgatgg cttacgagta tccgtctcat aagatctcag tgtacgtatc ggacgatgga      420
2674 ggatcttctc tgactttgtt tgctcttatg gaggtgccca agttctctaa gcattggttg      480
2676 cccttttgca agaataacaa tgttcaagat cgctctcctg aagtttatTT ttcttcaaa      540
2678 tcacattctt cgagtgtatg agctgaaaaa cttaagatga tgtacgaaga catgaagagt      600
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2682 tttagtgtgt tgctcgatct gtggacagat aaattcactc gtcatgacca tcttaccatt      720
2684 attatgttac gtgtatctgc cgtgatgaca aactcaccaa tcattctaac actagattgt      780
2686 gacatgtact caaacaatcc tacaacacca cttcatgctc tgtgctatTT gtcagacct      840
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2690 aatgatattt atgcatccga gctcaaacgc ccatttgaca tcaacacggt tgggtttgat      960
2692 ggacttatgg gaccagttca tatgggaact ggggttttct tcaatcgacg ggcgttttat      1020
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2722 ggcctatatg gtattttcac ttggggagaa ggaccgcgtc ttgaactgat gctagcgagt 1920
2724 ttcgcggtgg tgaattgctt accgatctat gaagccatgg tgttgaggat cgatgacgga 1980
2726 aaattaccaa aaaggatttg tttcttagct gggctcctca gttttgttct taccgggtca 2040
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2793 <210> SEQ ID NO: 57
2794 <211> LENGTH: 1077
2795 <212> TYPE: DNA
2796 <213> ORGANISM: Arabidopsis thaliana
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2803 acatgcccta acgcctctgc catcgcttgc agcattatc agcaagctct tcaatccgat 180
2805 gcaagaatcg gaggcagcct aatccgcctt cattttcacg actgttttgt taatggttgc 240
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2817 tcaaaatttg tagctgtcgg gctaaagaca accgatgtag tatccttgctc tggagcgcct 600
2819 acgtttgggc gtggtcaatg cgtaacgttc aacaatagac tattcaactt caacgggaca 660
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2825 aacaattact tcacgaacct tcagagtaac aatgggcttc tccagtcaga ccaggaactg 840
2827 ttctcaaaca ccggttcagc caccgtcccc attgttaatt cctttgcaag taaccagacc 900
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2831 gggagtagtg gagagattag acaagactgt aagggtggtta atggacagtc atcagccact 1020
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2846 gagaaaacca aaacggtgcc gttttataag ctctttgctt ttgcagattc ctttgatttc 180
2848 ctcttgatga tctcgggac gcttgatct attggaaatg gtcttggtt ccctcttatg 240
2850 accttactgt tcggagatct cattgatgct tttggagaga atcagactaa tacaacagac 300
2852 aaagtctcca aagttgctct gaagtttgta tggcttgga tgggtacttt cgcagctgct 360
2854 tttctccaat tgtctggctg gatgatttct ggagagagac aagcagcgag aataaggagt 420
2856 ttgtatctaa agacaatctt aagacaagat atagcctttt tcgacatcga tacaataaca 480
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2870 gtcattgaag gtggttcaac tggattgggt cttggaacgc tctttcttgt agtcttttgt 900

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/887,272

DATE: 07/30/2001

TIME: 11:31:15

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Output Set: M:\CRF3\07302001\I887272.raw

2872	agctacgctt	tagcagtatg	gtatggacga	aagttgatat	tggataaagg	ctacacagga	960
2874	ggacaagttc	tcaatatcat	catcgctgtt	ttaactggat	ccatgtggtt	aggtaaaca	1020
2876	tcgccttgct	taagegcatt	tgcagctgga	caagccgcgg	cttacaagat	gtttgagaca	1080
2878	attgagagaa	gacctaacat	agattcttat	agtacaaatg	gtaaagtttt	ggatgacatt	1140
2880	aaggagagata	ttgagctcaa	agatgtttac	tttacttacc	cagcgagacc	cgatgagcaa	1200
2882	atatttcgcg	gattctctct	gtttatctcg	agtggtagaa	cggtggcttt	agttggacaa	1260
2884	agtgggagcg	ggaaatctac	tggtgtgagt	ctgattgaga	ggttttacga	tccacaagct	1320
2886	ggtgacgttc	tcatagatgg	tattaactta	aaagagtttc	agctaaaatg	gattagaagc	1380
2888	aagattggac	ttgtgagtca	agaaccagtt	ttgttctactg	caagcatcaa	ggataacatt	1440
2890	gcgtacggca	aagaagacgc	aacaaccgaa	gagattaaag	cagctgcaga	gctagcaaac	1500
2892	gcatctaaat	ttgtggataa	gctaccacag	ggtttgata	caatggttgg	agaacatggt	1560
2894	actcagcttt	ccggtggaca	aaaacagaga	atcgcggtgg	ctagagcaat	cttaaaagat	1620
2896	ccaagaatct	tacttttaga	tgaagctaca	agcgcgttg	atgcagaatc	tgagagagtg	1680
2898	gttcaagaag	cgcttgatag	aattatggtt	aaccggacta	ctgttggtgt	cgctcatcgg	1740
2900	ttaagcactg	tgcgaatatg	ggatatgata	gctgtgatcc	accaaggcaa	gatcgctcag	1800
2902	aaagggttct	acacggaact	actaaaggac	ccggaaggag	cttattctca	gctgattcgt	1860
2904	ctacaagaag	agaagaaatc	tgatgagaat	gcagcggagg	agcaaaagat	gtcatcaatt	1920
2906	gaatcattca	aacaatctag	tctgagaaaa	tcgtctctag	gccggtctct	aagcaaaagg	1980
2908	ggatcatcca	gaggaaacag	cagccgccat	tctttcaata	tgtttggttt	tccagcagga	2040
2910	attgacggaa	acgtcgttca	agatcaagaa	gaggatgata	ctacacaacc	aaaaaccgaa	2100
2912	ccaaaaaaag	tctccatttt	cagaattgct	gctctaaaca	aaccagagat	tccggtgcta	2160
2914	atacttggat	caatatccgc	agcagcaaat	ggcgttatcc	ttccaatctt	tggcatacta	2220
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2918	ttctgggcaa	tcatattcat	ggttcttggt	ttcgcatcca	tcattgcata	cccagcacia	2340
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2922	gagaaagtgg	ttcacatgga	agttggatgg	ttcgacgagc	cagagaattc	tagtggaaacc	2460
2924	ataggagcaa	ggctatcagc	agatgctgcc	acaatccgtg	gtctagttgg	agactctttg	2520
2926	gctcagacag	ttcagaatct	ttcatctata	ttggctgggt	tgatcattgc	atttttggtt	2580
2928	tgttggcaat	tagctttcgt	ggtcctcgcg	atgctccgcg	ttatcgcact	caatggattt	2640
2930	ctttatatga	agttcatgaa	aggtttcagc	gctgatgcaa	agaaaatgta	cggggaagca	2700
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2940	gttttcaggg	ttttctttgc	tttgacaatg	gcggcaatgg	cgatatctca	atcgagttcg	3000
2942	ttatctccag	attccagcaa	agccgatgta	gctgctgcct	cgattttcgc	aataatggac	3060
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2946	gacattgagc	ttcgtcatgt	tagtttcaaa	taccagcaa	gaccagatgt	tcaaatcttc	3180
2948	caagacctct	gtctaagcat	tcgagctgga	aagacagttg	ctttggttgg	agaaagcggt	3240
2950	agcgggaaat	caacggtgat	tgcatgtgtg	cagaggtttt	acgatccaga	ttcaggtgag	3300
2952	atcactcttg	acggtgtaga	gatcaagagc	ctaagactaa	aatggctaag	acaacaaacg	3360
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2962	aagggtgttc	tgctcgacga	agccacgagt	gctcttgacg	ctgagtctga	gcgtgtggtt	3660
2964	caggacgcgc	tagaccgtgt	tatggtaaac	cggactacga	ttgtggtagc	tcaccgggta	3720
2966	tcgacgatta	agaatgctga	cgtaattgcc	gtcgtaaga	acggcgatc	cgttgagaaa	3780
2968	ggaaagcacg	acacgttgat	caatatcaaa	gacggagttt	atgcttcgtt	agttcagctt	3840

RAW SEQUENCE LISTING

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Output Set: N:\CRF3\07302001\I887272.raw

E--> 2970 catctaaccg cggtttcttg

3861 3860

3270 <210> SEQ ID NO: 64

3271 <211> LENGTH: 771 770

3272 <212> TYPE: DNA

3273 <213> ORGANISM: Arabidopsis thaliana

3275 <400> SEQUENCE: 64

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3278	aagccgatgc	ttgaacattc	cggccaccgt	gtcacggttt	ttgatcttac	ggcgcattggt	120
3280	gtgaacatga	gcagagtaga	agatattcag	actttggagg	atttcgctaa	gccgttgctt	180
3282	gaggttcttg	agtcttttgg	ctcggatgat	aaagtagtcc	tcgtcgcgca	tagcctcggt	240
3284	ggaataaccg	ctgctcttgc	agccgacatg	tttcctagta	aaatctctgt	tgctgtcttc	300
3286	gttacttctt	ttatgcccga	cacaacgaat	ccaccttctt	acgtgttcga	aaagtctctc	360
3288	ggaagcatta	cagaagaaga	acgtatggac	ttcgagttag	ggagctatgg	aacagatgac	420
3290	catccactaa	agactgcttt	tcttggaact	aactacttga	agaatatgta	tctactttct	480
3292	cctatcgaag	attatgaatt	ggccaaaatg	ttgatgagag	tcacaccggc	tattactagt	540
3294	aatctgacgg	ggactaaaaa	cttaacggca	caaggatatg	gatcgattag	tcgtgtgtat	600
3296	atcgtatcgc	gagaagataa	gggtatacgt	gtagatttcc	aacgatggat	gattgagaac	660
3298	tctccggtta	aagaagtgat	ggagatcaaa	gatgcagatc	atatgcctat	gttttccaag	720

E--> 3300 cctcatgaac tctgtgatcg tcttctaaag attgctgata aatatcccta

771 770

3336 <210> SEQ ID NO: 66

3337 <211> LENGTH: 1674

3338 <212> TYPE: DNA

3339 <213> ORGANISM: Arabidopsis thaliana

3341 <400> SEQUENCE: 66

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3344	tgccttgtcc	tctccttcgt	agccattctt	ggctctgtgg	ctttcttcac	agcccaatta	120
3346	atctccgtta	acaccaacaa	taatgatgat	tccttattaa	ctacgagcca	gatttgccat	180
3348	ggagctcacg	accaagactc	atgccaaagt	ctcttgtccg	aattcacgac	gttgctcgctc	240
3350	tcaaagctca	accgccttga	cctattgcac	gtgtttttga	agaactcggg	gtggcggctt	300
3352	gagagcacga	tgaccatggt	gagcgaggct	aggatccgct	cgaacgggtg	tagagacaag	360
3354	gcagggtttg	ctgactgcga	ggagatgatg	gacgtatcaa	aggatcggat	gatgagttcg	420
3356	atggaggaac	ttcgcggagg	aaactataat	cttgagtcat	actcaaacgt	tcatacttgg	480
3358	ctgagcagtg	tgcttacaaa	ctacatgaca	tgtttagaaa	gtattagtga	tgctccgctc	540
3360	aactctaagc	aaatagtcaa	gccacaactc	gaggacttgg	tttctagggc	aagagtggct	600
3362	ctagccatct	ttgtctccgt	cttgccctgcc	agagacgata	tcaaaatgat	catttccaat	660
3364	cgttctccgt	cgtggctaac	tgtctttgac	agaaagcttt	tagaatcttc	tcccaagaca	720
3366	cttaagggtga	ccgcgaacgt	tgtggtggca	aaagacggca	ccggaaagtt	caaaacagtg	780
3368	aatgaggcag	tggcggcagc	accggagaac	agcaatacaa	gatacgttat	atacgtaaag	840
3370	aaaggggttt	acaaagaaac	tattgacata	ggaaagaaaa	agaagaactt	aatgcttggt	900
3372	ggtgatggca	aagacgcaac	gatcataacc	ggtagtttga	atgtcattga	tggatccacc	960
3374	accttcagat	cagccactgt	tgctgccaat	ggagacgggt	ttatggcaca	agacatatgg	1020
3376	ttccaaaaca	ctgcagggcc	ggcaaagcac	caggctgtgg	ctctacgagt	gagtgtgat	1080
3378	caaactgtta	taaatcgttg	tcgcatagat	gcgtatcaag	acacgctcta	cactcacacg	1140
3380	ttgagacaat	tctaccgcga	cagctacatc	accggtaccg	tagatttcat	cttcggaaac	1200
3382	tctgctgtgg	tattccagaa	ctgcgacatc	gtggcacgaa	atcctggagc	tgggcaaaag	1260
3384	aacatgttaa	cggctcaagg	acgggaggat	cagaaccaga	acaccgccat	ttcgatccaa	1320
3386	aaatgtaaga	taacggctag	ttcggatctt	gtcctgttaa	aaggatctgt	gaaaacgttc	1380
3388	cttggtcgac	cgtggaagtt	gtactcaaga	acagtgatca	tgcagtcttt	cattgacaac	1440
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3392 tatggagagt atgcaaatac cggtcctgga ggggatacga gtaagagagt gaattggaag 1560
 3394 ggattttaaag ttatttaaaga ctcaaaagag gccgaacaat tcaactgtgc gaagcttatt 1620
 E--> 3396 caaggaggat tatggttgaa acccaactgga gttactttcc aagagtggct ttga 1680/674
 3440 <210> SEQ ID NO: 68
 3441 <211> LENGTH: 3621 3620
 3442 <212> TYPE: DNA
 3443 <213> ORGANISM: Arabidopsis thaliana
 3445 <400> SEQUENCE: 68
 3446 atgggagatg ggactgagtt tgtgggttagg tcagataggg aagataagaa gcttgctgag 60
 3448 gatagaatta gtgatgagca agtagtgaag aatgagttgg tgagatctga tgaagtaagg 120
 3450 gatgataacg aggacgaggt ttttgaggaa gcgattgggt cagagaatga tgagcaggag 180
 3452 gaggaggagg atccaaaacg tgaattgttt gaatctgatg atttgccttt agtggaact 240
 3454 cttaaaagtt ctatggttga gcatgaagtg gaggattttg aagaggcagt gggtgatttg 300
 3456 gatgaaacga gtagcaatga agggggtggt aaagatttta cggctgttgg agagagccat 360
 3458 ggtgcgggag aggcgtgaatt tgatgttttg gctactaaaa tgaatgggtg taagggggaa 420
 3460 ggaggtggag gtggttctta tgataaagtt gaatcgagct tggatgttgt tgataccact 480
 3462 gagaatgcta catcaactaa tactaatggt tccaatttag cagctgagca tgtgggtatt 540
 3464 gaaaacggaa agactcatto ttttttggga aatggaatcg cctctcctaa aaataaagaa 600
 3466 gtggtggctg aagttatccc taaagatgat gggattgagg aaccatggaa tgatggcatt 660
 3468 gaagtcgata attgggagga aagagttgat ggcatacaga cagaacaaga ggttgaggaa 720
 3470 ggtgaaggaa caactgaaaa tcaatttgag aaacggacag aagaagaggt tgtagaaggt 780
 3472 gaaggaacaa gtaagaatct atttgagaaa cagacagaac aagatgttgt ggaaggtgaa 840
 3474 ggaacaagta aggatctatt tgagaatggt tcagtatgta tggacagtga gtccgaggca 900
 3476 gaaagaaatg gtgagactgg tgccgcctac acaagtaata tcgttactaa tgcttcaggt 960
 3478 gacaatgaag tatcaagtgc tgtgacttca tctccattgg aggaatctag ttccggggaa 1020
 3480 aaggagagaga ctgaagggga cagtacttgt ttaaaaccag agcaacactt ggcttcttcg 1080
 3482 ccgcaactcat atcctgagtc aactgaagtt cacagcaata gtggctcccc tggggttaact 1140
 3484 agtagagaac acaaaccagt tcaaagtgt aatggaggac atgatgttca gagtccctcaa 1200
 3486 ccaaataagg agcttgagaa gcagcaaagc agcagagtac atgtagatcc agagattaca 1260
 3488 gaaaattcac atgtggaaac agaacctgag gtagtaagtt ctgtttcacc aacagagtct 1320
 3490 agaagtaatc ctgcggcatt accacctgct cgtccagcag gtcttggtcg tgcttctcct 1380
 3492 cttttggaac ctgcatcacg tgctcctcaa cagtctcgcg tcaatgggaa tgggtctcac 1440
 3494 aatcagtttc agcaagctga agactctacc actacagagg ctgatgagca tgatgagacc 1500
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 3506 tgtactgatg cattccagat ggggacaaag agggttcaag atgttgaggg tttggttcag 1860
 3508 ggaattaagg tacgggtgat tgacactccc ggtctcttac ctctctggtc tgatcaagcc 1920
 3510 aagaatgaga agatcctgaa ttctgttaag gctttcatca agaagaatcc acctgacatt 1980
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 3516 catgccgctt ctgttccacc agatggccca aatggcactg cttctagcta tgatatgttt 2160
 3518 gttacacaac gttctcatgt catccagcag gccattcgcc aagcagctgg agatatgagg 2220
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 3524 tctaagattc tagcagaagc aaatgctctt ttgaagttgc aagataatat tccagggaga 2400
 3526 ccatttgcag ctcggtccaa ggctccgcca ttaccatttc tcctttcatc gcttctgcaa 2460

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3528 tcaagaccac aacctaaagt tcctgaacag cagtatggtg atgaagaaga tgaagatgat 2520
3530 ttagaagaat catcagattc agacgaagaa tcagagtatg atcagcttcc tccgtttaag 2580
3532 agtttgacta aagctcagat ggctacgctt agtaaattctc agaagaagca gtatctcgat 2640
3534 gaaatggagt accgagagaa acttttaagt aagaagcaaa tgaaagagga aagaaagaga 2700
3536 cgtaagatgt ttaagaaatt tgctgcagag attaaagatt tgcctgatgg gtatagtga 2760
3538 aatgtggaag aggagagtgg tggacctgca tcagttccag ttcctatgcc agatttatct 2820
3540 ctacctgcgt cttttgactc tgataaccct actcaccgct accggtacct tgattcctcc 2880
3542 aatcagtggc ttgttaggcc agtcctggaa actcatgggt gggatcatga tattggttat 2940
3544 gaaggtgtga atgcagaacg gctctttggt gtaaaagaaa aaataccaat atctgtctca 3000
3546 ggtcaagtga caaaagacaa gaaggatgca aatgtgcagc tagaaatggc cagctcgggt 3060
3548 aaacatggag agggtaaatt aacttcccta ggtttcgaca tgcaaactgt tggaaaggaa 3120
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3556 ggagattttg cttatgggtg tactttggaa gctcagttga gagataaaga ttatccgctt 3360
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3560 ggagggaaca tacagtctca ggttcccatt ggacgttcc taaatttaat tgctcgtgct 3480
3562 aatctgaaca atagaggagc agggcaagta agtgttcgtg ttaacagctc cgagcagctc 3540
3564 caacttgcta tggttgcgat tgttccctct tcaagaagc tacttagtta ttattaccgc 3600
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3570 <211> LENGTH: 1401
3571 <212> TYPE: DNA
3572 <213> ORGANISM: Arabidopsis thaliana
3574 <400> SEQUENCE: 70
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3577 tttcccaggc catgctctca gagaaattct ctgtctttga ttcaatgcga tataaaagag 120
3579 agatctttcg gagagtctat gacgatcacg aatcgtggat tgagttttaa gacgaatgtg 180
3581 tttgagcaag ctggttctgt gactggagac tgttcttatg atgaaacttc agctaaagca 240
3583 cgttctcatg ttgttcgaga agataagatt ggtgtcttgc ttttgaattt aggtggctct 300
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3589 cgtgctccga aactctaaaga agggatagct gctattggtg gtggctctcc tttgcgtaaa 480
3591 ataactgatg agcaagcgga tgctattaag atgtctttgc aagcgaagaa cattgctgct 540
3593 aatgtctatg ttggtatgcg gtattggtat ccgttcaactg aggaggctgt tcagcagata 600
3595 aagaaggaca aaattactag acttggttga ctgccattgt atcctcagta ttctatctct 660
3597 acaacgggtt caagcatacg cgttctccaa gatttattca ggaaagatcc gtacctagct 720
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3605 cagatggaag agtgatttga cttgataatg gaagagctaa aagccagagg ggttcttaac 960
3607 gaccataaat tggcatacca gagtcgtgtt ggcctgttcc aatggctgaa gccatacacc 1020
3609 gatgaggttc ttgtcgacct tggtaagagt ggtgttaaga gtctactagc cgttccagtc 1080
3611 agtttcgtga gtgagcacat tgagacactt gaggagatag acatggagta tagggaatta 1140
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3615 ttcatacccg acttagctga tgcagtgata gaatcacttc cttcagcaga agcaatgtca 1260
3617 aacccaaatg cagtggttga ctcagaagat agcgagtcgt cagatgcttt cagttacatt 1320
3619 gtcaagatgt tcttcggttc gattctggct ttcgtcctac ttctctcccc aaagatgttc 1380
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see item 8 on Error Summary sheet

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DATE: 07/30/2001

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Output Set: N:\CRF3\07302001\I887272.raw

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3626 <212> TYPE: DNA
3627 <213> ORGANISM: Arabidopsis thaliana
3629 <400> SEQUENCE: 71
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3632 atcaattctc tagaattaga tcggcatagt tttcctgatg atttcatctt tgggacagct      120
3634 gcctcggcgt ttcagtagca aggtgcaaca agtgaagggt gcaagtctcc aactatatgg      180
3636 gatcacttca gcctcacgta tccagaaaagg accaaaatgc ataatgcaga tgtagcaatt      240
3638 gattttttatc atcggtacaa ggatgacata aaattgatga aggagctaaa catggacgct      300
3640 ttccgatttt caatctcgtg gtcaagatta ataccagtg gaaagctaaa ggatggagta      360
3642 aacaaagaag gtgtacaatt ctacaaggat ctcatagacg aacttcttgc taatgacata      420
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3664 cgcttcgctg ctcatcttcc tcacatagac cctgaaaaac ctcgtttcaa aactgaccac      1080
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3680 ttccttaaga aatcggtcgt cggagagagt aacaaagagg aggtagagga gatgtcacgc      1560
3682 gcggaaggga ataagacttt taagggtttc gaagaatcgg cgggtttctt tgcattcttc      1620
3684 atggcaatga accaatcgag gagagatgag gagaataatc gttgctcctt tgattttcct      1680
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1734

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p. 15

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4137 cctaaactcg caggtctcga gagatgtgga aagagctgta gactcagatg gatcaattac      180
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4143 gacaacgaga taaagaactt gtggaattcg tgcattaaga agaagctgat gaagaaaggc      360
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4149 tctgattttg ccgagtattc tgcgtttcag aaagaagaat ccaactctgt ttcactcaga      540
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4298 gacatctcca atagcaacaa agactccgcg acgtcatccg aagatgttct tgcaattata 540
4300 gatgagagct tttggtcaga agtggatttg atggactgtg acatttcagg aaatgagaag 600
4302 aatgagaaaa agatagagaa ttgggagggc tcactagata gaaacgataa gggatataac 660
4304 catgacatgg agttttggtt tgaccatctc actagtagta gttgtataat tggagaaatg 720
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4533 <213> ORGANISM: Arabidopsis thaliana
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4610	atcgacacca	agaacacagc	tgacacaaca	atttacagca	tagagaagag	tcttggtgaa	2280
4612	tacagagaga	agatcccaag	tgaaatcgcc	aaggagattg	aagatgctgt	ggcagatcta	2340
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4618	ggaggaggat	ctgagggagg	cagtgatcaa	gctccagagg	cagagtacga	ggaagtgaac	2520
4620	aaggtgatt	taatcgagat	cccatttctt	ttggtggctt	acttctctcg	aatttacgca	2580
4622	ggaagatcat	tagcagagaa	ttctcatctg	attcagtcca	tggtcgccac	ggctcttttc	2640
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4638	atctcagggg	tttacttgac	cggtgtcact	ttcgctggct	accttctcta	cctgaagatg	3120
4640	ggtatgatct	gcctcaacta	cccgagtttc	taccaagtcc	tttaccatac	acaacagcaa	3180
4642	cttccagtca	tcacctcggt	tactgcatta	gcgcctattt	atcatactat	caagagtact	3240

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E--> 4866 <210> SEQ ID NO: 97

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4871 <400> SEQUENCE: 97

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(3261) 326.0

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RAW SEQUENCE LISTING

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 8696 tccgtctacc gtcacggagt tgccaccgtt gttatggctc cgttcgcctt ctacttcgac 180
 8698 aagatagtga gaccgaagat gacagcgttg attttcttca aaatagcgat tcttgggtta 240
 8700 ttagatccag tgattgtcca aaacttatcc aatctcggga tgaaatacac gacagctaca 300
 8702 tttgcaattg ccttgtacaa cactttacct gcagtcacgt tcatcctcgc cttaatatcc 360
 8704 aggctcgaaa gcgtgaagtt tcaaagtatc aggagtgcgg ctaagggtgg tggaaacagta 420
 8706 actacagttg gaggaatcat ggatcatgaca cttgtaaaag gtccagctct tgacctcttc 480
 8708 tggactaaag gaccctctgc acagaacaca gttgggaccg atattcatag ctccatcaaa 540
 8710 ggtgcagttt tagtcacaat tgggtgcttc agctatgcat gtttcatgat actacaagca 600
 8712 atcacattga agacttacct tgcagagctc tctctcgcaa catggatatg cctaataagg 660
 8714 acaatagagg gagtagttgt agcattagtg atggagaaa gaaatcctag cgtgtgggcc 720
 8716 attggttggg aactaaact tcttacaatc acctatagtg ggatagtgtg ctcagcgctt 780

RAW SEQUENCE LISTING

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Input Set : D:\382636.txt

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8718 gggtactaca ttggaggagt ggtgatgaaa accagaggtc ctgtgtttgt aacagctttc 840
 8720 aaacctcttt gtatgatcgt tgtggcgatt atgtcgagca tcatctttga tgagcagatg 900
 8722 tacctcgga gggctcttgg tgctacggtc atatgtgtag gtctatacct tgtgatatgg 960
 8724 ggcaaagcca aagattatga atatcctagc acgccgcaaa tagatgatga cttagcacia 1020
 E--> 8726 gcaaccacaa gcaagcaaaa agaacaaaga agaacagtga tagaatcagt ctaa (1080)/094

9643 <210> SEQ ID NO: 204

9644 <211> LENGTH: 2037

9645 <212> TYPE: DNA

9646 <213> ORGANISM: Arabidopsis thaliana

9648 <400> SEQUENCE: 204

9649 atgtcttctc tcttcccttt catattcctt tctcttttct cattcctcac tagcttcaga 60
 9651 gcttctgctc aagatcctcg tttcctagcc tattattgtc caaatgcaac aacttactca 120
 9653 agtaacagca cttactttgac caatcttaaa acccttttgt cctctctctc ttcccgcaac 180
 9655 gcctcttact ccaccggatt ccaaaacgcc acggtgggac aagcccttga cagggtcacc 240
 9657 ggacttttcc ttgtccgggg agacgtctcg ccggaaagag aagctgtgtt ctattacgag 300
 9659 gagtgcatac tcagatactc tcacaagaat attctatcga cggccattac aaacgaagga 360
 9661 gaatttatct tgaggaaccc caatcatatt tctcctattc aaaatcaaatt aaaccagttt 420
 9663 actaatttgg tgttatctaa tatgaaccaa attgccatcg aagcagccga caatcctaga 480
 9665 aaattctcta cgataaagac cgaattgacc gcactccaga ctttctacgg gcttggtcaa 540
 9667 tgcactcctg atctttcaag acaaaactgc atgaactgtc tgacaagttc catcaataga 600
 9669 atgccatttt ctagaattgg agcaagacag ttttggccaa gttgtaattc aaggtacgag 660
 9671 ctttacgatt tctacaacga aaccgccatt ggtacaccac caccgccgct gcctccgttg 720
 9673 gcactcctt cactatctgg tgaacagttt cttctacctt tgccctgtt acttgatctt 780
 9675 tgcagtatta ccaatatgga acgcagaatg atctgtttaa acgcagataa aagtgggaat 840
 9677 tcaaatgtgg tcgtggtagc cggtgttggt cctatcatag tcgctgttct gattttcata 900
 9679 gctgggttatt gtttctttgc aaagagggca aagaagactt atggcacaac acctgcttta 960
 9681 gatgaagatg ataaaacaac catagagtcg ctgcaacttg attatagagc aattcaagct 1020
 9683 gcaacaaatg atttttcaga gaataataaa attggtcgag gaggttttgg tgacgtttac 1080
 9685 aagggtacat tttcaaattg aaccgaagtt gcagtgaaga gactgtcgaa aacatcagaa 1140
 9687 caaggtgaca cagaattcaa gaacgaggtt gtagttgttg caaatcttcg gcacaaaaat 1200
 9689 cttgttagga ttctcggtt ttctatgaaa cgagaagaaa ggatatttgt ctacgagtat 1260
 9691 gtgaaaaata aagcccttga taacttccta tttgatcctg caaagaaagg tcagttgtac 1320
 9693 tggacacagc gaaccatat cattggtggg attgctagag ggatcctata tcttcatcaa 1380
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 9699 cagcagaaca caagcagaat agttggtacc tacggttaca tgtctcctga atatgcatg 1560
 9701 cgtggccagt tctcaatgaa atctgatgtc tatagtttcg gagtgttagt tcttgagatt 1620
 9703 ataagcggta ggaagaacaa cagctttatc gagacagatg acgcacagga cttggtgaca 1680
 9705 catgtaagtt taaaggaaag gagttatata tatgcttggg ggctttggag aaacggaaca 1740
 9707 gcgttagacc tcgtggatcc attcattgca gatagttgcc ggaagagtga agtggttcga 1800
 9709 tgcaccata tcggtctttt atgtgttcaa gaagatcctg taaaacgtcc agccatgtca 1860
 9711 accatttccg tgatgtcac tagtaataca atggctttac cagcgccctca gcaaccaggg 1920
 9713 ttttttgtaa ggagtagacc tggaacaaac cggcttgatt cagatcaatc aacgaccaac 1980
 E--> 9715 aagtctgtta cagtatctat tgacgataag tcaatgtctg atttagatcc tcgttga (2040) 2037

10458 <210> SEQ ID NO: 215

10459 <211> LENGTH: 2097

10460 <212> TYPE: DNA

10461 <213> ORGANISM: Arabidopsis thaliana

10463 <400> SEQUENCE: 215

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Input Set : D:\382636.txt

Output Set: N:\CRF3\07302001\I887272.raw

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10464 atggaatttg cttcgccgga acaacgtcgt ctcgaaacca ttcgatctca catcgatact      60
10466 tctccgacca acgatcaatc atcatctcta ttctcaacg ccaccgcttc ttctgcttca      120
10468 cctttcttta aagaggatag ctacagtgtt gtgcttcag aaaagcttga tactggaaaa      180
10470 tggaaatgtct acagatctaa aagatcgctt acgaaactcg ttagtagggt cccggatcat      240
10472 cctgaaatcg ggactttaca tgacaatttt gtacatgctg ttgaaacata tgctgaaaac      300
10474 aagtatcttg gtacacgagt tcggtccgat ggaaccattg gagagtattc atggatgaca      360
10476 tatggagaag cagcgtctga gcgacaagcc attggttcag gactcttggt tcatggaggt      420
10478 aaccaaggag attgcggttg actctatattt attaacagac cagagtgggt ggttggtgat      480
10480 catgcttggt cagcatattc atttgtctct gtctctttat atgatacact tgggccagac      540
10482 gctgttaagt ttgtggtgaa tcatgctaatt ctgcaagcta tattttgtgt accacaaacc      600
10484 ttgaatattg taattgctaa gcttctctagc ggaaatccca tccattcgtc tcattgtggg      660
10486 gctgatgagc atttgccatc acttctctga ggaactggag tcacaattgt atcataccaa      720
10488 aagctattga gtcagggtcg aagtagctta catccatttt cgcctccaaa gccagaagac      780
10490 attgcaacca tatgtacac aagtggaaac acaggaacac caaagggtgt tgtgttgact      840
10492 catggaact tgatcgcaa tgtcgtggtt tccagtgtgg aagcagaatt ctttcttca      900
10494 gatgtttaca tatcatatct tctttggcg cacatatatg aacgtgcaaa tcagattatg      960
10496 ggggtgtatg gtggtgttgc tgtcgtttc tatcaggggg atgtcttcaa gctgatggat      1020
10498 gattttgctg gttaagacc aacaatattc tgtagtgtcc ctgccttata taatcgaata      1080
10500 tatgatggca ttacaagtgc cgtaaaatca tctggggttg tgaaaaaaag gcttttcgaa      1140
10502 attgcttata actcaaagaa gcaagcgatc attaatgggc ggactccttc tgcattttgg      1200
10504 gacaagctgg tgttcaacaa aataaaagaa aagcttggtg gacgggttcg gtttatgggg      1260
10506 tctggtgctt ctcctttgtc acctgatgtc atggatttct tgagaatatg ctttggatgt      1320
10508 tcggtgcgtg aagggtatgg tatgaccgag acttcttggt tcataagtgc tatggatgat      1380
10510 ggtgacaatt tatctggcca tgtcgttcc cctaateccag cttgcgaggt aaaacttgtg      1440
10512 gatgttcccg aaatgaatta cacatcagac gatcaaccat acccacgtgg tgaaatctgt      1500
10514 gtaagaggac caatcatctt caaaggctac tacaagatg aagaacaaac gagagaaatt      1560
10516 cttgatggag atggctggct acacacagga gatatcgggt tgtggttacc tgggtggtcgg      1620
10518 ctcaagatca tagacaggaa gaagaacata ttaagttgg cgcaaggaga atatatagca      1680
10520 ccagagaaga tcgaaaatgt ttataccaaa ttagattcgt tttcgcagtg tttcattcac      1740
10522 ggtgatagct tcaattctc tctagtagct atagtttcag tcgaccccgga agttatgaaa      1800
10524 gattgggtcg catcagaagg catcaagtat gagcatctag gacagctctg taacgatcca      1860
10526 agagtgcgaa agactgttct tgcgtagatg gatgacctg gaagagaagc tcagttgaga      1920
10528 ggggttgagt ttgcaaaggc tgtgactttg gtgccagaac cattcacctt ggagaatgga      1980
10530 cttctcacac caacattcaa gataaagaga cctcaagcaa aagcctactt tgcagaagca      2040
E--> 10532 attagcaaaa tgtatgcgga aatcgcagcc tcgaacccca ttcttcttaa actgtga      (2100) 2097
10678 <210> SEQ ID NO: 219
10679 <211> LENGTH: 414
10680 <212> TYPE: DNA
10681 <213> ORGANISM: Arabidopsis thaliana
10683 <400> SEQUENCE: 219
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10686 ctgcggccgc tategettaa aacgcaggga aacggcgaga gagttcggat ggtggtggag      120
10688 gagaacgcgg tgattgtgat tggacggaga ggatgttgca tgtgtcatgt ggtgaggagg      180
10690 ctgcttcttg gacttgaggt gaatccggcg gtccttgaga ttgatgagga gagggaaagat      240
10692 gaagttttga gtgagttgga gaatattgga gttcaaggcg gcggaggtac ggtgaagtta      300
10694 cggcggttt atgtaggag gaggtgttt ggagggttag atagggttat ggctactcat      360
E--> 10696 atctccggtg agttagtcc aattcttaag gaagttgggg ctctgtggtt gtga      (420) 414
E--> 12114 <210> SEQ ID NO: 246-247 seg 245 minus
E--> 13296 <210> SEQ ID NO: 270 seg 268-269 minus

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RAW SEQUENCE LISTING
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DATE: 07/30/2001
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Input Set : D:\382636.txt

Output Set : N:\CRF3\07302001\I887272.raw

E--> 13720 <210> SEQ ID NO: 279
E--> 14344 <210> SEQ ID NO: 294
E--> 15135 <210> SEQ ID NO: 312
E--> 15535 <210> SEQ ID NO: 321
E--> 15590 <210> SEQ ID NO: 323
E--> 16069 <210> SEQ ID NO: 333
E--> 16131 <210> SEQ ID NO: 336
E--> 16690 <210> SEQ ID NO: 350
E--> 17107 <210> SEQ ID NO: 362
E--> 17397 <210> SEQ ID NO: 369
E--> 18195 <210> SEQ ID NO: 380
E--> 21063 <210> SEQ ID NO: 457
E--> 21826 <210> SEQ ID NO: 479
E--> 26415 <210> SEQ ID NO: 565
E--> 26495 <210> SEQ ID NO: 569
E--> 27326 <210> SEQ ID NO: 593
E--> 28750 <210> SEQ ID NO: 626
E--> 29458 <210> SEQ ID NO: 645
E--> 31195 <210> SEQ ID NO: 683
E--> 32073 <210> SEQ ID NO: 705
E--> 34516 <210> SEQ ID NO: 761
E--> 41007 <210> SEQ ID NO: 899
E--> 43542 <210> SEQ ID NO: 969

*see pp. 33-34 for missing
sequences*

43543 <211> LENGTH: 27
43544 <212> TYPE: DNA
43545 <213> ORGANISM: Artificial Sequence
43547 <220> FEATURE:
43548 <223> OTHER INFORMATION: a primer

~~OK~~ 43550 <400> SEQUENCE: 962
43551 caatggcttt ggtcctccac tggtcag

E--> 44010 <210> SEQ ID NO: 1954
45664 <210> SEQ ID NO: 1977

Seqs 1001 through 1953 missing

45665 <211> LENGTH: 1563

45666 <212> TYPE: RNA

45667 <213> ORGANISM: Nicotiana tabacum

45669 <400> SEQUENCE: 1977

It's not allowed in an RNA sequence.

E--> 45670 ggcacgagat taaactcaca ttcttgatta tcatcttcaa tggattcaaa gcaatcatca 60
E--> 45672 gaattagtgt tcacagtaag gagacaaaag ccagagctaa tagctccggc aaaaccaact 120
E--> 45674 ccacgtgaaa ctaagtttct ttctgatatt gatgatcaag aaggctctcg atttcaaatt 180
E--> 45676 cccgttatc aattttacca taaggattct tctatgggaa ggaaagatcc tgtaaagggt 240
E--> 45678 attaaaaagg ctatagctga aacacttggt ttttactatc catttgctgg ccgtctccgg 300
E--> 45680 gaaggaaatg gccggaaact gatggtggat tgtaccggcg aggggattat gtttgcgaa 360
E--> 45682 gcggatgctg atgttacact tgagcaattt ggagatgaac ttcagcctcc atttccatgc 420
E--> 45684 ttagaagaac ttctttatga tgttcctgac tctgctggag ttcttaattg ccctttgctt 480
E--> 45686 cttattcagg taactcgtct aagatgtggt ggttttatct tcgcgctaag attaaaccac 540
E--> 45688 acaatgagtg atgcaccagg tcttgcccaa tttatgaccg cagtgggtga aatggcacgc 600
E--> 45690 ggtggatctg ctccatctat acttccagtc tgggtgctgag aattgctaaa tgccagaaat 660
E--> 45692 ccgccccaa tgacatgtac acatcacgaa tacgatgaag tacgcgatac aaagggtaca 720
E--> 45694 attatccct tagacgacat ggttcacaaa tctttctttt ttggcccttc tgaagtctca 780

*Use
"u"
instead.*

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/887,272

DATE: 07/30/2001
TIME: 11:31:20

Input Set : D:\382636.txt
Output Set: N:\CRF3\07302001\I887272.raw

It's not allowed

```

E--> 45696 gcacttcgtc gatttgctcc tcatacattg cgtaagtgtt ccacttttga actgctcaca      840
E--> 45698 gcagtccttt ggcgttgctg aacaatgtcc ctaaaacctg atccagaaga ggaagtctgc      900
E--> 45700 gctctttgca ttgtcaatgc acgttcgagg ttcaatcctc ctttgcttac tggctactac      960
E--> 45702 ggcaacgcct ttgcattccc tgtagcagtc acaactgcgg ctaaaactgag caaaaatcca     1020
E--> 45704 ctaggatatg cactcgagtt agtgaagaaa acaaagtcgg atgtgacaga agaatatatg     1080
E--> 45706 aaatctgttg cagatttaat ggtgttaaaa ggtagacccc attttacagt ggtgaggact     1140
E--> 45708 tttcttgatg cagatgtgac tagaggtgga tttggagaag tggatttttg atggggaaaa     1200
E--> 45710 gcagtttatg gtggaccagc taaaggagga gtaggtgcaa ttcctggtgt ggctagtttt     1260
E--> 45712 tatataccat ttaaaaacaa gaaaggtgag aatggaattg tggttccaat ttgtttgcct     1320
E--> 45714 ggttttgcaa tggaacatt cgtcaaagaa cttgatggtg tggtgaaagt tgatgctcca     1380
E--> 45716 ttagtcaact caaactatgc cattatcaga cctgcccttt gagatattaa ttatgtcgaa     1440
E--> 45718 tacttttttt taataccacg attaaaggcc atagagtttg tcttcagtcg catatactcg     1500
E--> 45720 gcgtaatttc cttctgattt tatgtgtatg tagtttcaaa tggtgtaagt ttgtcttttt     1560
E--> 45722 atc
E--> 49890 <210> SEQ ID NO: 2000

```

> Seq 1981 through 1999 missing

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

FJI

<400> 68 (sep 30)

atgggagatg	ggactgagtt	tgtgggttagg	tcagataggg	aagataagaa	gcttgctgag	60
gatagaatta	gtgatgagca	agtagtgaag	aatgagttgg	tgagatctga	tgaagtaagg	120
gatgataacg	aggacgaggt	ttttgaggaa	gcgattgggt	cagagaatga	tgagcaggag	180
gaggaggagg	atccaaaacg	tgaattgttt	gaatctgatg	atttgccttt	agtggaaact	240
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gatgaaacga	gtagcaatga	aggggggtgt	aaagatttta	cggctgttgg	agagagccat	360
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 aatctgaaca atagaggagc agggcaagta agtggttcgtg ttaacagctc cgagcagctc 3540
 caacttgcta tggttgcgat tgttcctctc ttcaagaagc tacttagtta ttattaccgc 3600
 caaacgcaat atggacaatg 3621

Sequence 69 missing

<210> 70

Samples of other missing sequences:
 87, 96, 105, 146, 147, 149, 155, 157,
 161, 167, 245, 268-269, 276-278, 293,
 311, 320, 322, 332, 335, 349, (see
 pp 31-34
 for more)

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L:23 M:270 C: Current Application Number differs, Replaced Current Application No
L:23 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:124 M:254 E: No. of Bases conflict, LENGTH:Input:1401 Counted:1400 SEQ:2
L:124 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1401 Found:1400 SEQ:2
L:341 M:254 E: No. of Bases conflict, LENGTH:Input:1041 Counted:1040 SEQ:7
L:341 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1041 Found:1040 SEQ:7
L:450 M:254 E: No. of Bases conflict, LENGTH:Input:411 Counted:410 SEQ:10
L:450 M:252 E: No. of Seq. differs, <211>LENGTH:Input:411 Found:410 SEQ:10
L:491 M:254 E: No. of Bases conflict, LENGTH:Input:1011 Counted:1010 SEQ:11
L:491 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1011 Found:1010 SEQ:11
L:705 M:254 E: No. of Bases conflict, LENGTH:Input:2421 Counted:2420 SEQ:15
L:705 M:252 E: No. of Seq. differs, <211>LENGTH:Input:2421 Found:2420 SEQ:15
L:870 M:254 E: No. of Bases conflict, LENGTH:Input:321 Counted:320 SEQ:20
L:870 M:252 E: No. of Seq. differs, <211>LENGTH:Input:321 Found:320 SEQ:20
L:901 M:254 E: No. of Bases conflict, LENGTH:Input:720 Counted:717 SEQ:21
L:1273 M:254 E: No. of Bases conflict, LENGTH:Input:1440 Counted:1434 SEQ:33
L:1791 M:254 E: No. of Bases conflict, LENGTH:Input:2631 Counted:2630 SEQ:39
L:1791 M:252 E: No. of Seq. differs, <211>LENGTH:Input:2631 Found:2630 SEQ:39
L:2133 M:254 E: No. of Bases conflict, LENGTH:Input:1881 Counted:1880 SEQ:45
L:2133 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1881 Found:1880 SEQ:45
L:2445 M:254 E: No. of Bases conflict, LENGTH:Input:1620 Counted:1617 SEQ:49
L:2576 M:254 E: No. of Bases conflict, LENGTH:Input:660 Counted:654 SEQ:52
L:2728 M:254 E: No. of Bases conflict, LENGTH:Input:2061 Counted:2060 SEQ:54
L:2728 M:252 E: No. of Seq. differs, <211>LENGTH:Input:2061 Found:2060 SEQ:54
L:2833 M:254 E: No. of Bases conflict, LENGTH:Input:1080 Counted:1077 SEQ:57
L:2970 M:254 E: No. of Bases conflict, LENGTH:Input:3861 Counted:3860 SEQ:58
L:2970 M:252 E: No. of Seq. differs, <211>LENGTH:Input:3861 Found:3860 SEQ:58
L:3300 M:254 E: No. of Bases conflict, LENGTH:Input:771 Counted:770 SEQ:64
L:3300 M:252 E: No. of Seq. differs, <211>LENGTH:Input:771 Found:770 SEQ:64
L:3396 M:254 E: No. of Bases conflict, LENGTH:Input:1680 Counted:1674 SEQ:66
L:3566 M:254 E: No. of Bases conflict, LENGTH:Input:3621 Counted:3620 SEQ:68
L:3566 M:252 E: No. of Seq. differs, <211>LENGTH:Input:3621 Found:3620 SEQ:68
L:3569 M:214 E: (33) Seq.# missing, SEQ ID NO:69
L:3621 M:254 E: No. of Bases conflict, LENGTH:Input:1401 Counted:1400 SEQ:70
L:3621 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1401 Found:1400 SEQ:70
L:3686 M:254 E: No. of Bases conflict, LENGTH:Input:1740 Counted:1734 SEQ:71
L:4189 M:254 E: No. of Bases conflict, LENGTH:Input:1740 Counted:1737 SEQ:80
L:4273 M:254 E: No. of Bases conflict, LENGTH:Input:1020 Counted:1017 SEQ:82
L:4306 M:254 E: No. of Bases conflict, LENGTH:Input:741 Counted:740 SEQ:83
L:4306 M:252 E: No. of Seq. differs, <211>LENGTH:Input:741 Found:740 SEQ:83
L:4450 M:214 E: (33) Seq.# missing, SEQ ID NO:87
L:4644 M:254 E: No. of Bases conflict, LENGTH:Input:3261 Counted:3260 SEQ:90
L:4644 M:252 E: No. of Seq. differs, <211>LENGTH:Input:3261 Found:3260 SEQ:90
L:4866 M:214 E: (33) Seq.# missing, SEQ ID NO:96
L:4920 M:254 E: No. of Bases conflict, LENGTH:Input:1491 Counted:1490 SEQ:97
L:4920 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1491 Found:1490 SEQ:97
L:5262 M:214 E: (33) Seq.# missing, SEQ ID NO:105
L:5294 M:254 E: No. of Bases conflict, LENGTH:Input:801 Counted:800 SEQ:106

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L:5294 M:252 E: No. of Seq. differs, <211>LENGTH:Input:801 Found:800 SEQ:106
 L:5637 M:254 E: No. of Bases conflict, LENGTH:Input:1620 Counted:1614 SEQ:113
 L:6306 M:254 E: No. of Bases conflict, LENGTH:Input:1401 Counted:1400 SEQ:124
 L:6306 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1401 Found:1400 SEQ:124
 L:6351 M:254 E: No. of Bases conflict, LENGTH:Input:1140 Counted:1137 SEQ:125
 L:6613 M:254 E: No. of Bases conflict, LENGTH:Input:1641 Counted:1640 SEQ:131
 L:6613 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1641 Found:1640 SEQ:131
 L:6731 M:254 E: No. of Bases conflict, LENGTH:Input:1080 Counted:1074 SEQ:133
 L:7301 M:254 E: No. of Bases conflict, LENGTH:Input:360 Counted:357 SEQ:145
 L:7304 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 146 thru 147
 L:7351 M:214 E: (33) Seq.# missing, SEQ ID NO:149
 L:7534 M:214 E: (33) Seq.# missing, SEQ ID NO:155
 L:7577 M:214 E: (33) Seq.# missing, SEQ ID NO:157
 L:7637 M:254 E: No. of Bases conflict, LENGTH:Input:1680 Counted:1674 SEQ:158
 L:7749 M:254 E: No. of Bases conflict, LENGTH:Input:1740 Counted:1734 SEQ:160
 L:7752 M:214 E: (33) Seq.# missing, SEQ ID NO:161
 L:7975 M:214 E: (33) Seq.# missing, SEQ ID NO:167
 L:8032 M:254 E: No. of Bases conflict, LENGTH:Input:471 Counted:470 SEQ:169
 L:8032 M:252 E: No. of Seq. differs, <211>LENGTH:Input:471 Found:470 SEQ:169
 L:8055 M:254 E: No. of Bases conflict, LENGTH:Input:471 Counted:470 SEQ:170
 L:8055 M:252 E: No. of Seq. differs, <211>LENGTH:Input:471 Found:470 SEQ:170
 L:8261 M:254 E: No. of Bases conflict, LENGTH:Input:720 Counted:717 SEQ:174
 L:8438 M:254 E: No. of Bases conflict, LENGTH:Input:531 Counted:530 SEQ:179
 L:8438 M:252 E: No. of Seq. differs, <211>LENGTH:Input:531 Found:530 SEQ:179
 L:8560 M:254 E: No. of Bases conflict, LENGTH:Input:1221 Counted:1220 SEQ:181
 L:8560 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1221 Found:1220 SEQ:181
 L:8726 M:254 E: No. of Bases conflict, LENGTH:Input:1080 Counted:1074 SEQ:183
 L:8852 M:254 E: No. of Bases conflict, LENGTH:Input:771 Counted:770 SEQ:189
 L:8852 M:252 E: No. of Seq. differs, <211>LENGTH:Input:771 Found:770 SEQ:189
 L:9013 M:254 E: No. of Bases conflict, LENGTH:Input:1611 Counted:1610 SEQ:192
 L:9013 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1611 Found:1610 SEQ:192
 L:9715 M:254 E: No. of Bases conflict, LENGTH:Input:2040 Counted:2037 SEQ:204
 L:10195 M:254 E: No. of Bases conflict, LENGTH:Input:2481 Counted:2480 SEQ:210
 L:10195 M:252 E: No. of Seq. differs, <211>LENGTH:Input:2481 Found:2480 SEQ:210-
 L:10420 M:254 E: No. of Bases conflict, LENGTH:Input:1761 Counted:1760 SEQ:213
 L:10420 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1761 Found:1760 SEQ:213
 L:10455 M:254 E: No. of Bases conflict, LENGTH:Input:831 Counted:830 SEQ:214
 L:10455 M:252 E: No. of Seq. differs, <211>LENGTH:Input:831 Found:830 SEQ:214
 L:10532 M:254 E: No. of Bases conflict, LENGTH:Input:2100 Counted:2097 SEQ:215
 L:10696 M:254 E: No. of Bases conflict, LENGTH:Input:420 Counted:414 SEQ:219
 L:10775 M:254 E: No. of Bases conflict, LENGTH:Input:2160 Counted:2154 SEQ:220
 L:10984 M:254 E: No. of Bases conflict, LENGTH:Input:831 Counted:830 SEQ:225
 L:10984 M:252 E: No. of Seq. differs, <211>LENGTH:Input:831 Found:830 SEQ:225
 L:12007 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1161 Found:1160 SEQ:242
 L:12114 M:214 E: (33) Seq.# missing, SEQ ID NO:245
 L:12426 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1701 Found:1700 SEQ:250-
 L:12630 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1911 Found:1910 SEQ:254
 L:12698 M:252 E: No. of Seq. differs, <211>LENGTH:Input:771 Found:770 SEQ:256
 L:12891 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1581 Found:1580 SEQ:259

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L:13296 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 268 thru 269
L:13720 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 276 thru 278
L:13827 M:252 E: No. of Seq. differs, <211>LENGTH:Input:711 Found:710 SEQ:280
L:13901 M:252 E: No. of Seq. differs, <211>LENGTH:Input:741 Found:740 SEQ:282
L:14344 M:214 E: (33) Seq.# missing, SEQ ID NO:293
L:15132 M:252 E: No. of Seq. differs, <211>LENGTH:Input:981 Found:980 SEQ:310
L:15135 M:214 E: (33) Seq.# missing, SEQ ID NO:311
L:15203 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1881 Found:1880 SEQ:312
L:15535 M:214 E: (33) Seq.# missing, SEQ ID NO:320
L:15590 M:214 E: (33) Seq.# missing, SEQ ID NO:322
L:16037 M:252 E: No. of Seq. differs, <211>LENGTH:Input:501 Found:500 SEQ:330
L:16069 M:214 E: (33) Seq.# missing, SEQ ID NO:332
L:16131 M:214 E: (33) Seq.# missing, SEQ ID NO:335
L:16244 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1341 Found:1340 SEQ:337
L:16374 M:252 E: No. of Seq. differs, <211>LENGTH:Input:2931 Found:2930 SEQ:339
L:16471 M:252 E: No. of Seq. differs, <211>LENGTH:Input:261 Found:260 SEQ:342
L:16690 M:214 E: (33) Seq.# missing, SEQ ID NO:349
L:16761 M:252 E: No. of Seq. differs, <211>LENGTH:Input:711 Found:710 SEQ:351
L:17107 M:214 E: (33) Seq.# missing, SEQ ID NO:361
L:17397 M:214 E: (33) Seq.# missing, SEQ ID NO:368
L:18195 M:214 E: (33) Seq.# missing, SEQ ID NO:379
L:18462 M:252 E: No. of Seq. differs, <211>LENGTH:Input:681 Found:680 SEQ:387
L:18747 M:214 E: (33) Seq.# missing, SEQ ID NO:396
L:18882 M:214 E: (33) Seq.# missing, SEQ ID NO:400
L:18966 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1611 Found:1610 SEQ:403
L:19539 M:252 E: No. of Seq. differs, <211>LENGTH:Input:771 Found:770 SEQ:416
L:20219 M:214 E: (33) Seq.# missing, SEQ ID NO:430
L:20345 M:252 E: No. of Seq. differs, <211>LENGTH:Input:921 Found:920 SEQ:433
L:20608 M:214 E: (33) Seq.# missing, SEQ ID NO:442
L:20636 M:252 E: No. of Seq. differs, <211>LENGTH:Input:711 Found:710 SEQ:443
L:20676 M:214 E: (33) Seq.# missing, SEQ ID NO:445
L:21063 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 455 thru 456
L:21111 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1281 Found:1280 SEQ:457
L:21140 M:252 E: No. of Seq. differs, <211>LENGTH:Input:651 Found:650 SEQ:458
L:21143 M:214 E: (33) Seq.# missing, SEQ ID NO:459
L:21397 M:214 E: (33) Seq.# missing, SEQ ID NO:466
L:21507 M:214 E: (33) Seq.# missing, SEQ ID NO:469
L:21826 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 477 thru 478
L:24180 M:214 E: (33) Seq.# missing, SEQ ID NO:511
L:24238 M:214 E: (33) Seq.# missing, SEQ ID NO:514
L:24458 M:214 E: (33) Seq.# missing, SEQ ID NO:519
L:24680 M:214 E: (33) Seq.# missing, SEQ ID NO:524
L:24850 M:214 E: (33) Seq.# missing, SEQ ID NO:527
L:24921 M:214 E: (33) Seq.# missing, SEQ ID NO:529
L:25089 M:214 E: (33) Seq.# missing, SEQ ID NO:534
L:25228 M:214 E: (33) Seq.# missing, SEQ ID NO:538
L:25676 M:214 E: (33) Seq.# missing, SEQ ID NO:547
L:26107 M:214 E: (33) Seq.# missing, SEQ ID NO:555
L:26209 M:214 E: (33) Seq.# missing, SEQ ID NO:558

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L:26415 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 563 thru 564
 L:26495 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 567 thru 568
 L:26524 M:214 E: (33) Seq.# missing, SEQ ID NO:570
 L:26570 M:214 E: (33) Seq.# missing, SEQ ID NO:573
 L:26749 M:214 E: (33) Seq.# missing, SEQ ID NO:579
 L:27326 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 591 thru 592
 L:27369 M:214 E: (33) Seq.# missing, SEQ ID NO:594
 L:27570 M:214 E: (33) Seq.# missing, SEQ ID NO:598
 L:27617 M:214 E: (33) Seq.# missing, SEQ ID NO:600
 L:28496 M:214 E: (33) Seq.# missing, SEQ ID NO:616
 L:28717 M:214 E: (33) Seq.# missing, SEQ ID NO:622
 L:28750 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 624 thru 625
 L:28861 M:214 E: (33) Seq.# missing, SEQ ID NO:629
 L:28929 M:214 E: (33) Seq.# missing, SEQ ID NO:632
 L:29224 M:214 E: (33) Seq.# missing, SEQ ID NO:638
 L:29458 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 643 thru 644
 L:31195 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 681 thru 682
 L:32073 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 703 thru 704
 L:34516 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 758 thru 760
 L:41007 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 896 thru 898
 L:43542 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 962 thru 968
 L:43550 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:969 differs:962
 L:44010 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 1001 thru 1953
 L:44034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1955
 L:44036 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1955
 L:44040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1955
 L:44073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1957
 L:44108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1959
 L:44126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1960
 L:44150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1961
 L:44204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1964
 L:44236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1965
 L:45670 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:18
 L:45672 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
 L:45672 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:28
 L:45674 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:22
 L:45674 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:50
 L:45676 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
 L:45676 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:70
 L:45678 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
 L:45678 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:90
 L:45680 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
 L:45680 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:104
 L:45682 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:18
 L:45682 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:122
 L:45684 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:26
 L:45684 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:148
 L:45686 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:21
 L:45686 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:169

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L:45688 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
 L:45688 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:183
 L:45690 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:18
 L:45690 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:201
 L:45692 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:45692 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:210
 L:45694 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:23
 L:45694 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:233
 L:45696 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:21
 L:45696 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:254
 L:45698 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
 L:45698 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:268
 L:45700 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:21
 L:45700 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:289
 L:45702 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:12
 L:45702 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:301
 L:45704 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:13
 L:45704 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:314
 L:45706 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:18
 L:45706 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:332
 L:45708 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
 L:45708 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:352
 L:45710 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:18
 L:45710 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:370
 L:45712 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
 L:45712 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:390
 L:45714 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:19
 L:45714 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:409
 L:45716 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
 L:45716 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:429
 L:45718 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:23
 L:45718 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:452
 L:45720 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:31
 L:45720 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:483
 L:45722 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
 L:45722 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:484
 L:49890 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 1981 thru 1999
 L:49990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2003
 L:50032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2004
 L:50076 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2005
 L:50294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2006
 L:50418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2007

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/887,272

DATE: 07/30/2001

TIME: 11:32:05

Input Set : D:\382636.txt

Output Set: N:\CRF3\07302001\I887272.raw

L:50420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2007
L:50454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2008
L:50545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2010
L:50549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2010
L:50551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2010
L:50643 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2013
L:50837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2014
L:50845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2014
L:50855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2014
L:50857 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2014
L:50861 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2014
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L:50869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2014
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L:50963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2015
L:50997 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2016
L:51088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2018
L:51092 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2018
L:51094 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2018
L:51128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2019
L:51224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2020
L:51226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2020
L:51228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2020
L:51328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2021
L:51330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2021
L:51344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2022
L:51386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2023
L:51436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2024
L:38 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (6813) Counted (5727)

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